



IN REPLY  
REFER TO

**DEFENSE LOGISTICS AGENCY**  
DEFENSE NATIONAL STOCKPILE CENTER  
8725 JOHN J. KINGMAN ROAD, SUITE 4616  
FT. BELVOIR, VIRGINIA 22060-6220

March 21, 2000

**AMENDMENT NO. 003 TO  
BASIC ORDERING AGREEMENT FOR  
PLATINUM GROUP METALS**

**UNDER DLA-PGM-001**

The above referenced Solicitation for the sale of Platinum Group Metals is hereby amended to change the following:

**SECTION I – SUBMITTALS**

**1. Section I.2 Shopping List (FY00) (Platinum) p 29.**

Delete this page in its entirety and insert the attached page **I.2 Shopping List – Platinum (FY 00 Amendment 003.**

2. Bidders shall acknowledge receipt of this Amendment by signing in the space below and returning a copy of this form along with their bid to:

ATTN: DNSC-LX/Bid Custodian  
Defense National Stockpile Center  
8725 John J Kingman Road  
Suite 4616 (Mail) or Suite 4528 (Hand Delivery)  
Fort Belvoir, VA 22060-6223  
Facsimile No. (703) 767-5541

3. Except as provided herein, all other terms and conditions of DLA-PGM-001 and Amendments 001 and 002 thereto remain unchanged and still in full force and effect.

Failure to acknowledge receipt of this Amendment may result in the Bidder being ineligible for award.

**Name of Firm:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**PLATINUM**

FY 00 AMP: 125,000 tr oz

<i><b>Item Series</b></i>	<i><b>Description</b></i>	<i><b>Contract No.</b></i>	<i><b>Weight</b></i>	<i><b>%Pt</b></i>	<i><b>Supplier</b></i>	<i><b>Comments</b></i>
4000	Pt bars	DNSC MOU 97-001	3,973.510	99.95	Engelhard	22 bars; 172.685 - 191.765 tr oz



IN REPLY  
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**DEFENSE LOGISTICS AGENCY  
DEFENSE NATIONAL STOCKPILE CENTER  
8725 JOHN J. KINGMAN ROAD, SUITE 4616  
FT. BELVOIR, VIRGINIA 22060-6220**

October 28, 1999

**AMENDMENT NO. 002 TO  
BASIC ORDERING AGREEMENT FOR  
PLATINUM GROUP METALS**

**UNDER DLA-PGM-001**

The above referenced Solicitation for the sale of Platinum Group Metals is hereby amended to change the following:

**SECTION C – QUOTES**

**1. Subsection C.3 Reference Price, paragraph b.**

Delete paragraph b. in its entirety and replace with the following:

b. The actual contract price will be based on the actual London p.m. Fix price for the day succeeding the date of award. **Platinum**: No award shall be made should the London p.m. Fix price for the day succeeding the date of award fall by more than 3% of the London p.m. Fix price in effect on the day of award. **Palladium**: No award shall be made should the London p.m. Fix price for the day succeeding the date of award fall by more than 5% of the London p.m. Fix in effect on the day of award.

**SECTION J – LIST OF ATTACHMENTS**

**2. Subsection J.1**

Delete this subsection (p.38) in its entirety and replace with the attached J.1., page 38, Amendment No.002. **Please note change in outloading hours.**

**3. Bidders shall acknowledge receipt of this Amendment by signing in the space below and returning a copy of this form along with their bid to:**

ATTN: DNSC-LX/Bid Custodian  
Defense National Stockpile Center  
8725 John J Kingman Road  
Suite 4616 (Mail) or Suite 4528 (Hand Delivery)  
Fort Belvoir, VA 22060-6223  
Facsimile No. (703) 767-5541

**4. Except as provided herein, all other terms and conditions of DLA-PGM-001 remain unchanged and in full force and effect.**

5. Failure to acknowledge receipt of this Amendment may result in the Bidder being ineligible for award.

**Name of Firm:** \_\_\_\_\_

**Address:** \_\_\_\_\_

\_\_\_\_\_

**Signature:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**J.1 Storage Location, Operations and Logistics Division, and Quality Assurance and Technical Services Division**

Storage location is:

Somerville Depot  
152 U.S. Highway 206 South  
Somerville, NJ 08876-6400  
Attention: James Farley  
Phone #: (908) 707-4356  
Fax #: (908) 707-4350

Operations Office:

Mr. Vince Cangro  
Defense National Stockpile Center  
Operations and Logistics Division  
8725 John J Kingman Road, Suite 4528  
Ft. Belvoir, VA 22060-6223  
Phone #: (703) 767-7518  
Fax #: (703) 767-7608

Quality Assurance and Technical Services Division:

Dr. Russell J. Foster  
Defense National Stockpile Center  
Quality Assurance and Technical Services Division  
8725 John J Kingman Road, Suite 4528  
Ft. Belvoir, VA 22060-6223  
Phone #: (703) 767-7619  
Fax #: (703) 767-7716

**The material is stored at Somerville, NJ depot. The hours of operations for outloading at Somerville are 11:00 a.m. to 2:00 p.m. Monday through Friday.**



IN REPLY  
REFER TO

**DEFENSE LOGISTICS AGENCY**  
DEFENSE NATIONAL STOCKPILE CENTER  
8725 JOHN J. KINGMAN ROAD, SUITE 4616  
FT. BELVOIR, VIRGINIA 22060-6220

September 30, 1999

**AMENDMENT NO. 001 TO  
BASIC ORDERING AGREEMENT FOR  
PLATINUM GROUP METALS**

**UNDER DLA-PGM-001**

The above referenced Solicitation for the sale of Platinum Group Metals is hereby amended to change the following:

**SECTION I – SUBMITTALS**

**3. Section I.2 Shopping List (pp 29 – 31).**

Delete this subsection in its entirety and insert the attached three-page Subsection **I.2 Shopping List (FY 00)**.

Bidders shall acknowledge receipt of this Amendment by signing in the space below and returning a copy of this form along with their bid to:

ATTN: DNSC-LX/Bid Custodian  
Defense National Stockpile Center  
8725 John J Kingman Road  
Suite 4616 (Mail) or Suite 4528 (Hand Delivery)  
Fort Belvoir, VA 22060-6223  
Facsimile No. (703) 767-5541

Except as provided herein, all other terms and conditions of DLA-PGM-001 remain unchanged and in full force and effect.

Failure to acknowledge receipt of this Amendment may result in the Bidder being ineligible for award.

**Name of Firm:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**PLATINUM**

FY 00 AMP: 125,000 tr oz

<i>Item Series</i>	<i>Description</i>	<i>Contract No.</i>	<i>Weight</i>	<i>%Pt</i>	<i>Supplier</i>	<i>Comments</i>
2000	Pt sponge	GS-00J-10006	2,400.000	99.95	Johnson Matthey	6 jars/box; 100 tr oz/jar
	Pt sponge	GS-00J-10002	1,958.440	99.95	Johnson Matthey	6 jars/box; 100 tr oz/jar
	Pt sponge	GS-00P-10745 (FM-SM-54-48)	22.21	99.5	Baker	1 jar/box
3000	Pt ingots	GS-00-DS-(P)-94011	94,630.539	99.95	Engelhard	1 ingot/box: 504.37 - 599.320 tr oz
	Pt ingots	SCM-TS-2134	7,500.185	99.5		8-9 ingots/box; approx. 100 tr oz ea.
4000	Pt bars	GS-00P-10745 (FM-SM-54-47)	8,488.314	99.8-99.9	Compagnie des Metaux Precieux	approx. 23 bars/box; approx. 70 tr oz ea.
	Pt bars	GS-00P-10075	6,306.050	99.5	Baker	6 bars/box; approx. 150 tr oz ea.
5000	Pt plates	GS-00P-10198	201.49			
5500	Pt wire	NSP126	1.80	99.99	Infrared Industries	Sm. carton w/ loose wire
5900	Pt samples	SCM-TS-1111 SCM-TS-1199				2 bars gran/pwdr in glass jar
			27.68	99.5		
	Pt samples	010075N	0.10	99.5	Baker	Bottle
	Pt samples	SMPL MISC	5.32	99.5		Envelope

121,542.13

## I.2 Shopping List (FY 00)

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**PALLADIUM**  
FY 00 AMP: 200,000 tr oz

<i>Item Series</i>	<i>Description</i>	<i>Contract No.</i>	<i>Weight</i>	<i>%Pd</i>	<i>Supplier</i>	<i>Comments</i>
6000	Pd sponge	GS-00S-25864	3,649.717	99.95	Engelhard	6 jars/box; appr 50 tr oz/jar exc bx #30B (1 jar/bx)
	Pd sponge	GS-0084-DxxA-1038	8,400.000	99.95	Amax	4 jars/box; 100 tr oz/jar
	Pd sponge	GS-0084-DxxA-1042	1,200.000	99.95	Philipp Bros.	4 jars/box; 100 tr oz/jar
6500	Pd bars	GS-00-DS(P)-94016	8,598.885	99.95	Engelhard	6 brs/bx:79.727-102.863 tr oz ea bx total: 509.455 - 560.665 tr oz
7000	Pd ingots	GS-00-DS(P)-85018	4,414.539	99.95	Engelhard	1 ingot/box: 548.287 - 563.290 tr oz
	Pd ingots	59-GS-77 (BSD-SM-56-77)	30,000.660	99.9	Johnson Matthey	approx. 16-25 ingots/box; approx. 95-100 tr oz ea. bx total: 1730.210 - 2338.930 tr oz
	Pd ingots	59-GS-26 (BSD-SM-58-3)	20,202.175	99.8	Philipp Bros. / Engelhard	1 ingot/box: 489.330 - 527.440 tr oz
	Pd ingots	59-GS-26 (BSD-SM-58-41)	35,057.200	99.8	Compagnie des Metaux Precieux	6 ingots/box exc.3 boxes w/ 3,4, 5 ingots bx total: 289.425 - 567.223 tr oz
	Pd ingots	59-GS-26 (BSD-SM-58-41)	30,008.270	99.8	Engelhard	1 ingot/box: 249.470 - 546.640 tr oz
	Pd ingots	58-GS-158 (BSD-SM-58-3)	25,246.043	99.8	Philipp Bros. / Engelhard	1 ingot/box: 497.525 - 540.795 tr oz
	Pd ingots	59-GS-185 (BSD-SM-58-41-6)	10,000.000	99.8	Philipp Bros.	3 ingots/box exc.1 box w/ 4 ingots bx total: 613.170 - 643.700 tr oz
	Pd ingots	59-GS-242 (BSD-SM-58-41-7F)	683.920	99.8	Philipp Bros.	2 ingots/box
	Pd ingots	59-GS-242 (BSD-SM-59-6)	50,279.360	99.8	Mercantile Metal & Ore / Engelhard	4 ingots/box bx total: 592.10 - 599.91 tr oz
	Pd ingots	59-GS-242 (BSD-SM-59-7-1F)	15,000.000	99.8	Ayrton Metal & Ore	3 ingots/box exc.1 box w/ 4 ingots bx total: 616.18 - 675.32 tr oz
9500	Pd wire	NSP-11	109.105	99.8		

**242,849.874**



**I.2 Shopping List (FY 00)**

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**IRIDIUM**  
FY 00 AMP: 0

<i>Item Series</i>	<i>Description</i>	<i>Contract No.</i>	<i>Weight</i>	<i>%Ir</i>	<i>Supplier</i>	<i>Comments</i>
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NO MATERIAL AVAILABLE FOR SALE

# DLA-PGM-001

## BASIC ORDERING AGREEMENT FOR PLATINUM GROUP METALS



**BASIC ORDERING AGREEMENT  
BETWEEN THE  
UNITED STATES OF AMERICA  
AND**

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This agreement is entered into as of the \_\_\_\_\_ day of \_\_\_\_\_ 19\_\_\_\_ between the United States of America, hereafter called the “Government” represented by the Contracting Officer, and \_\_\_\_\_, a corporation organized and existing under the laws of the State of (if U.S. Corporation) \_\_\_\_\_, hereafter called “Contractor”.

The executed copy of this Agreement signed by a Contracting Officer shall be returned to the Contractor. All parts have been agreed upon by the parties hereto for use in fixed price contracts between the parties for the sale of platinum, palladium, and iridium, as specified in this Agreement, entered into on or after the date of this Agreement, and prior to its termination. It is further agreed that the clauses and provisions set forth shall, by reference or attachments, be incorporated in each contract awarded pursuant to this Agreement.

This Agreement has been executed by the parties shown below.

\_\_\_\_\_  
(Company Name)

UNITED STATES OF AMERICA

BY \_\_\_\_\_

BY \_\_\_\_\_

Name and Title of Signer

Name of Contracting Officer

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Date Signed \_\_\_\_\_

Date Signed \_\_\_\_\_

## BASIC ORDERING AGREEMENT

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## **PART I – THE SCHEDULE**

### **SECTION A – AGREEMENT/CONTRACT FORM**

#### **A.1 Introduction**

The Defense Logistics Agency (DLA), Defense National Stockpile Center (DNSC), is soliciting quotes for the sale of up to 100,000 troy ounces of Platinum, 150,000 troy ounces of Palladium, and 4,450 troy ounces of Iridium during Fiscal Year 1999.

#### **A.2 Basic Ordering Agreement (BOA)**

All material shall be sold under this Basic Ordering Agreement (hereafter called the Agreement) pursuant to the Award/Contract(s) issued by the Government. An executed I.1 Confirmation of Quote signed by a Contracting Officer together with this Agreement will constitute a contract.

#### **A.3 Material Description**

The platinum listed in Section I.2, Shopping List is in the form of sponge and ingots. The platinum was acquired from various sources during 1953 – 1997. The palladium listed in Section I.2, Shopping List is in the form of sponge, ingots, bars, and plates. The palladium was acquired from various sources during 1956 – 1977. The iridium listed in Section I.2, Shopping List, is in the form of sponge and powder. The iridium was acquired from various sources during 1952 – 1992. For specific analytical data on these materials contact Quality Assurance and Technical Services Division (see Section J.1). For more information regarding these commodities see Section I.2 of the Agreement. All of the material is packed in wooden boxes. The storage location is Somerville, NJ.

Government records indicate that the material conforms to the data provided; however, no warranty or guarantee is made that the material so conforms or that it will be suitable for any particular purpose.

**SECTION B – QUALIFYING TO QUOTE**

To participate in sales and to be considered for award, Quoters must be pre-qualified by submitting a completed Basic Ordering Agreement package prior to quoting. The following documents are required to be returned to the Defense National Stockpile Center in order to be qualified to quote: Basic Ordering Agreement (page 2), I.3 – I.9 in this agreement. The completed documents should be submitted to the address listed below or may be faxed to the facsimile number listed below

Defense National Stockpile Center  
Attn: Platinum Group Metals, DNSC-P2  
8725 John J Kingman Dr Suite  
4616 (Mail) or 4528 (Hand Delivered)  
Fort Belvoir, VA 22060-6223  
Fax: (703) 767-5484

The Agreement package will be evaluated to determine if the potential Contractor is responsible. No awards shall be made unless the Contracting Officer makes an affirmative determination of responsibility. To be determined responsible, a Contractor, shall, at a minimum, have adequate financial resources, a satisfactory performance record with DNSC, and a satisfactory record of integrity and ethics. For example, a Contractor may be determined to be non-responsible, and therefore ineligible for award if there is a record of poor payment (e.g., checks returned for insufficient funds) or poor performance (e.g., failure to pay for or remove material on time).

Accordingly, DNSC will evaluate prior payment history with DNSC, a current Dun & Bradstreet Report. If a contractor desires payment terms, copies of the most recent income statement and balance sheet for the company must be provided. The contractor may also elect to provide a listing of references to verify levels of business transactions. This data will be evaluated and DNSC will determine whether it will extend payment terms to a contractor and the amount of the contractor's credit limit. The maximum acceptable payment term is net five days after delivery.

Upon determining that a corporation is financially responsible, the contracting officer will sign the Agreement and return one copy to the corporation. At that point, the corporation will become eligible to submit quotes. Financial information may be required to be updated throughout the course of the BOA. Re-evaluation will occur on an ongoing basis as to responsibility. Should a contractor be determined no longer responsible by the Contracting Officer, written notice will be forwarded to the contractor advising of this change in status.

## **SECTION C – QUOTES**

### **C.1 Quotes**

a. The Government will post the material offered for sale for the day on its web site: [www.dnsc.dla.mil](http://www.dnsc.dla.mil) by 11:30 a.m., local time, Ft. Belvoir, VA. Any Contractor electing to participate in that day's sale shall submit its written quote via facsimile on the confirmation sheet identified in Section I.2. **The cut-off time for receipt of quotes for platinum and palladium is 1:30 p.m., local time, Ft. Belvoir, VA the same day. Iridium Quotes will be due at 1:30 p.m. local time, Ft. Belvoir, VA the next business day.** Contractors shall submit quotes to the facsimile number designated in Paragraph C.6. The Confirmation of Quotation form shall include the date of the quote, the unit price (see C.3 Reference Price), the commodity, and shall be signed by an authorized contractor's representative. In order to be considered for award, the Contractor's response to each request for quote (1) shall be submitted by the time designated for receipt of quotes; (2) shall remain valid for a period of two hours after the cut-off time for receipt of quotes; and (3) shall reference this Agreement number and the date of the request for quote to which the response is made.

b. The Government shall not be responsible for any technical problems related to the distribution of requests for quotations on the Internet, including but not limited to difficulties encountered by contractors accessing the website. However, widespread access difficulties or other compromises of the quotation process may provide grounds for canceling a request for quotations. If a contractor experiences problems accessing the website or obtaining information on sales designated for the day, please contact the following individuals:

Platinum:	Phyllis Shockley	(703) 767-5482
Palladium:	Diane Knight	(703) 767-5483
Iridium:	Debbie Nicholson	(703) 767-5478

**Note: Adobe Acrobat Reader is required to view the attachments (i.e. Basic Ordering Agreement, Quote Form) to the web-site. Adobe Acrobat Reader is available to download through the internet at [www.adobe.com](http://www.adobe.com), there is no charge to download this program.**

### **C.2 General Information (JUN 95)**

Facsimile quotations and modifications will be accepted in accordance with Section C.6. Quotes shall be submitted to facsimile number (703) 767-5541 to the attention of: Platinum Group Metals – Contracting Officer.

The Contractor agrees if its quotation is accepted by the Government within two (2) hours from the cut-off for receipt of quotes, but not later than 3:30 p.m., local time, to purchase any or all material which was quoted on at the price quoted and to take delivery of the material within the removal period specified in the executed Section I.1 **Confirmation of Quotation** page that is signed by a Contracting Officer.



### C.3 Reference Price

#### **Platinum and Palladium:**

- a. Quotes shall be expressed as a fixed dollar and cents value per troy ounce over/at/under the London p.m. Fix.
- b. The actual contract price will be based on the actual London p.m. Fix price for the day succeeding the date of award. **Platinum:** No award shall be made should the London p.m. Fix price for the day succeeding the date of award fall by more than 5% of the London p.m. Fix price in effect on the day of awards. **Palladium:** No award shall be made should the London p.m. Fix price for the day succeeding the date of award fall by more than 10% of the London p.m. Fix price in effect on the day of awards.

#### **Iridium:**

Quotes shall be expressed as a flat unit price per troy ounce.

### C.4 Minimum Quantity (JAN 95)

Minimum quantity shall be stated on the website <http://www.dnsc.dla.mil> each day as it pertains to the respective commodity. Minimum quantity will state the number of box(s), with a note at the bottom of the web page, indicating the approximate number of troy ounces per box.

### C.5 Late Submissions, and Modifications of Quotations (JUL 97)

- a. Any quotation received at the office designated in the Agreement after the exact time specified for receipt of Quotes will not be considered unless it is received before award is made and –
  - (1) There is acceptable evidence to establish that it was received at the activity designated for receipt of quotations and was under the Government's control prior to the time set for receipt of quotes, and the Contracting Officer determines that accepting the late quote would not unduly delay the sale; or
  - (2) It is the only quote received.
- b. Any modification to a quote, including a modification resulting from the Contracting Officer's request for confirmation, is subject to the same conditions stated in subparagraphs a. (1) through a. (2) of this provision.
- c. The only acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of the facsimile machine, or oral testimony or statement of Government personnel.

- d. Notwithstanding paragraph a. of this provision, a late modification of an otherwise successful quote that makes its terms more favorable to the Government will be considered at any time it is received and may be accepted.
- e. If an emergency or unanticipated event interrupts normal Government processes so that quotes cannot be received at the office designated for receipt of quotes by the exact time specified in the Agreement, and urgent Government requirements preclude amendment of the Agreement or other notice of an extension of the closing date, time specified for receipt of quotes will be deemed cancelled.

## C.6 Facsimile Submissions (JUL 97)

Facsimile quotations and modifications will be accepted any time prior to the exact time set for receipt of confirmation of quotes. Facsimile withdrawals will be accepted any time before the cut-off time for quotes. **Quoters must submit quotes to facsimile number (703) 767-5541.**

- a. Definition: "Facsimile submission," as used in this Agreement, means a written confirmation of an oral quote, modification of a quote, or withdrawal of a quote that is transmitted to and received by the Government via electronic equipment that communicates and reproduces both printed and handwritten material.
- b. Quoters must submit facsimile submissions as a response to this Agreement. These responses must arrive at the designated place, by the time specified in the Agreement.
- c. Facsimile submissions that fail to furnish required information, that reject any of the terms, conditions, and provision of the Agreement, that contain garbled information, or are otherwise incomplete, may be excluded from consideration.
- d. Facsimile submissions must contain the required signatures.
- e. The Government reserves the right to make award solely on the facsimile submission. However, if requested to do so by the Contracting Officer, the apparently successful Quoter agrees to promptly submit the complete original signed submission.
- f. The Government will not be responsible for any failure attributable to the transmission or receipt of the facsimile submission including, but not limited to, the following:
  - (1) Receipt of garbled or incomplete submission.
  - (2) Availability or condition of the receiving facsimile equipment.
  - (3) Incompatibility between the sending and receiving equipment.
  - (4) Delay in transmission or receipt of submission.

(5) Failure of the Quoter to properly identify the submission.

(6) Illegibility of submission.

(7) Security of submission data.

#### **C.7 Consideration of Quotes (FEB 98)**

a. The Government reserves the right to –

(1) Reject any or all quotes;

(2) Waive any informalities and minor irregularities in a Quote;

(3) Award a quantity less than the quantity quoted at the unit price quoted;

(4) Accept any one item or group of items in a Quote, as may be in the best interest of the Government;

b. Quoters may submit multiple quotes for multiple quantities at various unit prices and may specify a maximum quantity.

#### **C.8 Evaluation of Quotes**

a. Quotes will be evaluated on the basis of price alone.

b. To participate in sales and be considered for award, Quoters must be pre-qualified by submitting a completed Basic Ordering Agreement package prior to quoting.

#### **C.9 Sales Procedures**

DNSC will solicit quotes from pre-qualified contractors for a specific quantity of material with a set quality in a specific form on any given day designated by the Government. All pre-qualified contractors will be invited to quote. The process for receipt of quotes shall be as follows:

a. By 11:30 a.m., local time, Ft. Belvoir, VA, the Government will post its daily PGM sales, if any, on its web site: [www.dnsc.dla.mil](http://www.dnsc.dla.mil). The form, quality, supplier, type of the material, minimum quantity, and notes to include information on awards and if applicable sales from the previous day will be included on the web page.

b. Pre-qualified parties shall be prepared to quote a price they would be willing to pay for the designated material.

c. All pre-qualified parties shall be required to confirm quotes in writing on I.1 Confirmation of Quotation form and fax confirmation sheet by 1:30 p.m. local time, Ft. Belvoir, VA the same day for platinum and palladium quotes and the next business day for iridium quotes.

- d. Quotes shall remain valid until 3:30 p.m. local time, Ft. Belvoir, VA.

**C.10 Contract Award (JUL 97)**

A written award or acceptance of a quote signed by the Contracting Officer and furnished to the successful quoter(s) by 3:30 p.m. local time, Ft. Belvoir, VA shall result in a binding contract incorporating all the terms and conditions of the Agreement unless otherwise stated in the executed Section I.1 Confirmation of Quotation.

**C.11 Unsuccessful Quoters (FEB 98)**

The Contracting Officer will notify unsuccessful quoters telephonically at the earliest practicable time of the basis for non-award.

**SECTION D – PAYMENT****D.1 Payment (FEB 98)**

- a. Payment shall be made in U.S. dollars.
- b. Payment shall be made by wire transfer, U.S. Postal Service money order, company or bank check.
  - (1) Wire transfer payment shall be made in accordance with instructions in Section J.3. Fees for wire transfers are the responsibility of the contractor. If payment is by wire transfer and the wrong account number is used, shipment of material may be delayed by up to one week or the wire transfer may be returned to the sender.
  - (2) All checks must be drawn on a U.S. Domestic bank or on a United States branch of an acceptable foreign bank and must be payable in United States currency. **A service charge of \$100.00 will be applied to all returned checks.**
- c. Payment shall be made to the **Defense Finance and Accounting Service – Columbus (DFAS – Columbus)**. If a check is not made payable to DFAS – Columbus, the check may be returned and the \$100.00 fee stated in **D.1.b(2)** charged. Payment shall be accompanied by **identifying information including the contract number, invoice number, and a description of the material purchased**. Payments without the required identification may be returned and shipment delayed. Payments shall be sent to:

ATTN: DNSC-DF, Accounts Receivable  
Defense National Stockpile Center  
8725 John J Kingman Road  
Suite 4616 (Mail) or Suite 4528 (Hand Delivered)  
Fort Belvoir, VA 22060-6223
- d. Invoices issued for material adjustments, for variations in quantity or weight, storage charges, or interest shall be paid promptly.
- e. If payment is not made in full within 30 calendar days of issuance of an invoice, the Government will issue a “demand” letter, demanding payment of the outstanding amount. If all moneys due are not paid within 30 calendar days after the date of the Government’s demand letter, the Contractor will be considered delinquent and any outstanding charges will be reduced by any subsequent payments. No material will be shipped until all delinquent charges are paid. (See Sections F.1a. and G.11)

**D.2 Payment Due Date**

- a. Payment due dates will be applied as follows:
  - (i) If payment terms are not extended, payment will be made before shipment of material and before the end of the contract period specified in the executed Section I.1 Confirmation of Quote signed by a Contracting Officer.
  - (ii) If payment terms are approved and a credit limit established, then promptly after passage of title (execution of Section I.1) to the purchaser of any quantity of material sold hereunder, the purchaser shall pay to the Government the full amount of each contract no later than 5 days after receipt of material. If the purchaser under this agreement or any resultant contract with the Government, fails to make prompt payment, the Government at its sole discretion may revoke such payment terms. DNSC will monitor payment terms and credit limits closely. If Contractor reaches its credit limit, all subsequent sales will be on a cash and carry basis until account balance is reduced or credit limit is increased. If Contractor has a delinquent account, it can no longer participate in sales program until delinquency has been eliminated. Contractor may request to increase his credit limit by providing the necessary documentation to the PGM Contracting Officer. The Contracting Officer will review the request and provide a written response within 5 days of receipt of the request.
- b. If payment is not received by 11:00 a.m. local time, on the payment due date, payment will not be credited until the next Government business day. Interest and storage charges will accrue accordingly.
- c. In the event the payment due date falls on a Saturday, Sunday, or holiday, then the payment due date will be extended to the next Government business day.

**D.3 Interest (JUL 97)**

- a. All amounts that become payable by the Contractor to the Government under this contract shall bear simple interest from the date due until paid. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in 41 U.S.C. 611, which is applicable to the period in which the amount becomes due, as provided in paragraph b. below.
- b. Amounts shall be due at the earliest of the following dates:
  - (1) The final day of the contract period specified in Section I.1 Confirmation of Quotation; or
  - (2) The date of the first written demand for payment under the contract.

**SECTION E – MATERIAL REMOVAL****E.1 Removal of Material (FEB 98)**

- a. The removal period is five (5) business days from the date of contract award.
- b. The contract period excludes Saturday, Sunday, and holidays.
- c. If the Contractor fails to remove the material within the specified time frame in this Agreement, the Contractor will be considered delinquent and no material will be shipped until payment has been made.

**E.2 Storage Charges (JUL 97)**

- a. Storage charges shall be assessed on all material not removed in accordance with the contract period. The Government reserves the right to remove any remaining material to a commercial storage facility and be reimbursed by the Contractor for any expenses incurred. Storage charges continue to accrue until all the material has been removed or the contract is terminated for default, in which case the Contractor will be liable for damages, as set forth in Section G.8 of this Agreement.
- b. The storage charge is the greater of the following (1) \$0.005 per troy ounce (If a fraction of a ounce remains, the charge will be for a full ounce) per ten day period regardless of whether the material remains in storage for a period of 10 days or less than 10 days; or (2) commercial storage charges, if applicable.
- c. Storage charges will be invoiced upon shipment. Payment shall be made promptly.
- d. Payment of storage charges shall not relieve the Contractor of its obligation to remove the material in a timely manner. Acceptance of storage payments by the Government is not a waiver of the Government's right to default the Contractor for failure to remove the material (See Section G.8).

## **SECTION F – SHIPPING**

### **F.1 Request for Shipment (FEB 98)**

- a. Delivery is F.O.B. carrier's conveyance. Contractor shall complete and fax the form in Section J.2 Shipping Instructions to the Contracting Officer. The Government will only accept shipping instructions from those individuals designated in Section I.8 as being authorized to request shipment of material on behalf of the Contractor. **No material will be shipped until all outstanding delinquent charges and payments have been satisfied.**
- b. "Shipping Instructions" shall include the following:
  - (1) Quantity of material to be shipped;
  - (2) Designation of type and kind of conveyance
  - (3) Name of the carrier (please include a telephone number where this contact can be reached.);
  - (4) "Ship to" location;
  - (5) Minimum load per conveyance (optional);
  - (6) Desired shipping schedule;
  - (7) Name and telephone number of an agent who can furnish additional shipping information if needed;
  - (8) Any additional information.
- c. The shipping schedule shall allow sufficient time for the Government to reasonably meet such schedule prior to the last day of the contract removal period commensurate with existing loading facilities and other commitments at the Government's storage locations. Information regarding Government commitments may be obtained from the address specified in Section J.1.
- d. For hand-to-hand delivery, in addition to shipping instructions requested above, the Contractor shall furnish the name of the Contractor's duly authorized agent(s) who will advise DNSC of the name(s) and provide a signature specimen of the employee(s) authorized to take delivery. The Contractor or its agent shall acknowledge receipt at the storage location of the items hand-to-hand delivered by the Government.
- e. The Contractor, its agent and employees shall comply with all applicable rules at the storage depot; Federal, state and local load limitations; and all safety, health, and environmental requirements.
- f. Requests for shipment shall be faxed to the attention of : Platinum Group Metals, Contracting Officer at (703) 767-5494.
- g. The Government shall determine the order in which the material is scheduled, coordinated, and outloaded.



**F.2 Insurance Requirements (APR 95)**

The Contractor shall procure and maintain, and require any subcontractor to procure and maintain, during the entire period of performance under this contract, such insurance as stipulated herein.

- a. Workers compensation and employers liability. The Contractor is required to comply with applicable Federal and State workers' compensation and occupational disease statutes. Employer's liability coverage of at least \$100,000 is required except in States with exclusive or monopolistic funds that do not permit workers compensation to be written by private carriers.
- b. General liability. Bodily injury liability insurance coverage written on the comprehensive form of policy of at least \$500,000 per occurrence.
- c. Automobile liability insurance written on the comprehensive form of policy is required. The policy shall provide for bodily injury and property damage liability covering the operation of all automobiles used in connection with performing the contract. Policies covering automobiles operated in the United States shall provide coverage of at least \$200,000 per person and \$500,000 liability coverage on other policies shall be commensurate with any legal requirements of the locality and sufficient to meet normal and customary claims.

**F.3 Weighing (JAN 95)**

- a. Weight of record shall be used for the government weight certificate and outbound shipping report.
- b. Weight certificates shall be prepared by the Government and shall be final for payment purposes.

**F.4 Weight Discrepancy (JAN 95)**

- a. If the Contractor's net weights for the material delivered vary from Government's certified net weights by more than one-eighth of one percent, the Contractor may give notice of such difference to the Contracting Officer within 48 hours (exclusive of Saturday, Sunday, and Government holidays) after shipment of the material, requesting that the material be reweighed. In that case, the Contractor shall segregate the shipment in question and hold it intact pending reweighing. The entire shipment shall be reweighed by the Contractor at its expense, in the presence of and in the manner approved by the Government representative, using scales approved by the Government's representative. If the weight varies from the Government's certified weight by an amount greater than one-eighth of one percent, plus or minus, that weight shall govern for payment purposes. If the weight determined by reweighing does not vary from the Government's certified weight by an amount greater than one-eighth of one percent, plus or minus, the Government's certified weight shall be final for payment purposes.

- b. No adjustment shall be considered or made in accordance with the above paragraph unless notice is given by the Contractor to the Contracting Officer within the time specified above and all other requirements of the paragraph are complied with.

#### **F.5 Assumption of Risk and Disclaimer of Liability (JUL 97)**

The Contractor, its assignees or agents, assumes full responsibility for all injury or damage to persons or property occasioned by or occurring in connection with or incident to any use or possession of this material. The Government assumes no liability for any damages to the property of the Contractor any other person or property, or for any personal injury, illness, disability or death to the Contractor, Contractor's employees or any other person subject to Contractor's control, or for any other consequential damages arising from or incident to the purchase, use, loading, processing, disposition, or any subsequent operation performed upon, exposure to or contact with any component, part, constituent or ingredient of this item, material or substance.

#### **F.6 Environmental Protection (JUN 95)**

##### **a. Transportation Requirements**

- (1) The transportation of hazardous material is governed by the Department of Transportation (DOT) Hazardous Materials Regulations (Title 49 Code of Federal Regulations, Parts 170 – 189). If the material being transported is covered by DOT Regulations, the Contractor or its agent is responsible for certifying to DOT that hazardous materials are properly classified, described, packaged, marked, and labeled and are in a condition safe to transport based on the Contractor's or its agent's own examination of the material. (See especially 49 CFR 173.7(a)(1).)
- (2) The Government reserves the right to conduct reasonable inspection of the Contractor's or its agent's transportation conveyances or other equipment utilized to effect removal of the material purchased under this Agreement. Inspection may occur prior to, during, or subsequent to removal of the material from Government storage locations. The Contractor or its agency shall provide a Government representative with access and any reasonable assistance required to conduct this inspection.

##### **b. Material Safety Data Sheets**

- (1) Contractors are warned that unprotected exposure to hazardous substances, hazardous materials and hazardous chemicals may significantly increase the risk of health problems. The Contractor shall comply with all applicable Occupational Safety and Health Administration (OSHA) and any other Federal, state or local laws, codes, ordinances, and regulations (including obtaining any required licenses or permits) governing exposure to, and storage, handling, transportation, and disposition of, this material.

- (2) Material Safety Data Sheets as required by OSHA Hazard Communication Standard – 29 CFR 1910.1200 are incorporated herein (see Section J.4). This data provides specific toxicity and health related data for the protection of human health and the environment. Contractors should review this information carefully. It is the responsibility of the Contractor to further communicate this information to the distributor, manufacturer, user and/or transporter of this material as may be required by Federal regulations.
- (3) Contractors shall also refer to 29 CFR 1910 Occupational Safety and Health Standards, specifically sections 1910.1000 through 1050. These occupational standards set standards for permissible exposures, methods of compliance, personal protective equipment, and other measures that must be taken when working with, or in proximity to, hazardous materials, chemicals and substances in the United States and its territories and possessions.

c. Use and Disposition

- (1) The Contractor certifies that it shall use and ultimately dispose of any hazardous material purchased under this Agreement in accordance with all applicable Federal, state, local and international laws and regulations and in a manner safe for the public and the environment.
- (2) The material offered under this Agreement is not, in its present form, subject to EPA Hazardous Waste Regulations (40 CFR Part 260 et seq.) issued under the Resource Conservation and Recovery Act. However, it is possible that use of this material will lead to the creation of a hazardous waste. 40 CFR Part 260 et seq., details the responsibilities of generators, transporters, treaters, storers, and disposers of hazardous waste. Failure to comply with these regulations can lead to civil and criminal penalties.

**SECTION G – CONTRACT ADMINISTRATION DATA****G.1 Effective Period (JAN 95)**

This Agreement shall be in effect until withdrawn by the Government or superseded by another Agreement.

**G.2 Amendments and Modifications (JAN 95)**

- a. Changes in terms and conditions of this Agreement shall be accomplished by written amendment signed by the Contracting Officer only.
- b. Changes in terms and conditions of any resulting contract shall be accomplished only by written modification signed by the Contracting Officer.

**G.3 Title (JAN 98)**

Title to the material shall pass to the Contractor upon execution of the contract; however, removal is subject to the remaining terms and conditions of the agreement and any resulting contract.

**G.4 Risk of Loss (JAN 98)**

- a. Prior to the date specified for removal, the Government shall be responsible only for the exercise of reasonable care for the protection of the material.
- b. After the date specified for removal, or any extension approved in writing by the Contracting Officer, all risk of loss, damage or destruction from any cause whatsoever shall be borne by the Contractor.

**G.5 Limitation on Government's Liability (JAN 95)**

- a. Except as provided in paragraph b. in any case where liability of the Government to the contractor has been established, the measure of the Government's liability shall not exceed refund of whatever portion of the purchase price the Contractor has paid.
- b. Where specifically authorized in writing by the Contracting Officer, the Contractor may recover reasonable costs of packing, loading, and transportation incurred in connection with return of material to the Government.

**G.6 Protests (FEB 97)**

**a.** Companies protesting any resultant sale under this solicitation may file a protest 1) with the Contracting Officer (see paragraph d.1) , or 2) with the General Accounting Office (see paragraph e), or 3) pursuant to Executive Order 12979, with the activity for a decision at a level above the Contracting Officer (see paragraph d.2). Protests filed with the activity should be addressed to the Contracting Officer, but should clearly state that they are an "Agency Level Protest under Executive Order 12979." (This process allows for a higher level decision on the initial protest; it is not a review of a Contracting Officer's decision on a protest filed with the Contracting Officer.) Absent a clear indication of the intent to file an agency level protest, protests will be presumed to be protests to the Contracting Officer.

**b. Protests Based on Alleged Improprieties in Solicitation**

Protests based upon alleged improprieties in a solicitation which are apparent prior to bid opening or the time set for receipt of initial proposals shall be filed prior to bid opening or the time set for receipt of initial proposals. In procurements where proposals are requested, alleged improprieties which do not exist in the initial solicitation but which are subsequently incorporated into the solicitation must be protested not later than the next closing time for receipt of proposals following the incorporation. A protest by any person concerning the terms of this Agreement shall be filed before that person submits a completed Basic Ordering Agreement package as specified in Section B. Protests concerning the terms of any request for quotes hereunder shall be filed prior to the time set for receipt of quotes.

**c. Other Protests**

Protests other than those covered by paragraph b of this clause shall be filed not later than 10 calendar days after the basis of protest is known or should have been known (whichever is earlier).

**d. Service of Protest**

1. Protests shall be served on the Contracting Officer by obtaining written and dated acknowledgment of receipt from:

Attn: DNSC-P - (Insert name of the Contracting Officer)  
Defense National Stockpile Center  
8725 John J. Kingman Road  
Suite 4616 (Mail) or Suite 4528 (Hand delivered)  
Ft. Belvoir, VA 22060-6223

2. Protest shall be served on the DNSC for a decision at a level above the Contracting Officer by obtaining written and dated acknowledgment of receipt from:

Attn: DNSC-P, Director, Directorate of  
Stockpile Contracts  
Defense National Stockpile Center  
8725 John J. Kingman Road  
Suite 4616 (Mail) or Suite 4528 (Hand delivered)  
Ft. Belvoir, VA 22060-6223

**e. Receipt of Protest**

A copy of the protest shall be received in the office designated above within one day of filing a protest with the GAO at the following address:

General Counsel  
Attn: Procurement Law Control Group  
U.S. General Accounting Office  
441 G Street, NW  
Washington, DC 20548

The Government shall not be responsible for any technical problems related the distribution of requests for quotations on the Internet, including but not limited to difficulties encountered by contractors in attempting to access such requests. However, widespread access difficulties or other compromise of the quotation process may provide grounds for canceling a request for quotations.

**G.7 Disputes (JAN 95)**

- a. This contract is subject to the Contract Disputes Act of 1978 (41 U.S.C 601-613) (the Act).
- b. Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.
- c. "Claim" as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. A claim arising under a contract, unlike a claim relating to that contract, is a claim that can be resolved under a contract clause that provides for the relief sought by the claimant. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding \$100,000 is not a claim under the Act until certified as required by subparagraph d.(2) below. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this paragraph, if it is disputed either as a liability or amount or is not acted upon in a reasonable time.
- d. (1) A claim by the Contractor shall be made in writing and submitted to the Contracting Officer for a written decision. A claim by the Government against the contractor shall be by written decision of the Contracting Officer.  
  
(2) For Contractor claims exceeding \$100,000, the Contractor shall submit with the claim a certification that -
  - (i) The claim is made in good faith;

- (ii) Supporting data are accurate and complete to the best of the Contractor's knowledge and belief; and
  - (iii) The amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable.
- (3) (i) If the Contractor is an individual, the certification shall be executed by that individual.
- (ii) If the Contractor is not an individual, the certification shall be executed by -
    - (A) A senior company official in charge at the Contractor's plant or location involved, or
    - (B) An officer or general partner of the Contractor having overall responsibility for the conduct of the Contractor's affairs.
- e. For Contractor claims of \$100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over \$100,000, the Contracting officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.
- f. The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in the Act.
- g. At the time a claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use alternative means of dispute resolution. When using alternative dispute resolution procedures, any claim, regardless of amount, shall be accompanied by the certificate described in paragraph d(2) of this clause, and executed in accordance with paragraph d(3) of this clause.
- h. The Government shall pay interest on the amount found due and unpaid from (1) the date the Contracting Officer receives the claim (properly certified if required), or (2) the date payment otherwise would be due, if that date is later, until the date of payment. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each six-month period as fixed by the Treasury Secretary during the pendency of the claim.
- i. The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or activity arising under the contract, and comply with any decision of the Contracting Officer.

**G.8 Default (JUL 97)**

- a. (1) The Government may, by written notice of default to the Contractor, terminate this contract in whole or in part if the Contractor fails to –
  - (i) Make payment and remove the material within the time specified in this contract or any extension;
  - (ii) Remove the material within the time specified in this contract irrespective of whether or not payment has been made;
  - (iii) Make progress, so as to endanger performance of this contract; or
  - (iv) Perform any of the other provisions of this contract.
- (2) The Government's right to terminate this contract under (1)(i) through (1) (iv) above, may be exercised if the Contractor does not cure such failure within 10 days (or more if authorized in writing by the Contracting Officer) after receipt of the notice from the Contracting Officer specifying the failure. If at any time prior to the expiration of this contract, the Contractor makes it clear either by words, actions, or circumstances, that the Contractor is unwilling or unable to perform under this contract, the Government shall not be required to furnish the Contractor notice specifying a failure under this contract, prior to exercising its right to terminate this contract for default and seek damages.
- (3) Upon the Contractor's failure to cure such default within that period (or such further period as the Contracting Officer may allow), the Contractor shall lose all right, title and interest which it might otherwise have acquired in and to the material as to which a default has occurred.
- b. If the Government terminates the contract, the Contractor shall be held liable for damages as described below. However, in no event will damages exceed the original contract price.
- c. If the Government terminates the contract for default, it may subsequently resell the material for the Contractor's account, under the terms and in the manner the Contracting Officer considers appropriate, and assess the Contractor the difference between the contract price and the price obtained on resale. In no event will the Contractor be refunded any money if the Government obtains a greater price on resale, nor will an accounting of money be made until resale is complete. In the event that the Government does not succeed in reselling the material within 12 months, the Contractor may be held liable for the full contract damages on contracts where the contract price is determined on a formula-price basis, the Government will establish the contract price for the quantity of material on which the default has occurred as follows: Using the price mechanism set forth in the contract, the Government will set the price as though the material had been priced on the last day of the contract removal period or the date of the termination notice, whichever is earlier.



- d. The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

#### **G.9 Termination for Convenience of the Government (DEC 97)**

- a. The Contracting Officer, by written notice, may terminate this contract, in whole or in part, when it is in the Government's interest. If this contract is terminated, the Government shall only be liable for actual costs incurred by the Contractor before the effective date of termination.
- b. If a bona fide requirement for the material develops or exists prior to removal of the material from Government control, the Government may withdraw that material from the sale. In the event of a withdrawal under this condition, the Government shall be liable only for the refund of the contract price of the withdrawn material or such portion of the contract price as it may have received plus simple interest at the rate established by the Secretary of the Treasury.

#### **G.10 Excusable Delays (MAY 95)**

- a. In the event either party should be prevented from performing under this contract by reason of any unforeseeable cause beyond its control and without its fault or negligence, including, but not restricted to, acts of God or of the public enemy, sovereign acts of the United States, acts of a foreign Government, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes and unusually severe weather, performance under the contract shall be suspended in whole or in part until the cause ceases to exist and thereafter the time for fulfillment of the contract shall be extended by the length of time during which the cause prevented performance under the contract.
- b. This section shall also apply to an excusable delay condition that prevents delivery at a consignee's plant if –
  - (1) the delay meets the criteria in paragraph a. above; and
  - (2) the identity of the consignee is known to the Government prior to commencement of the excusable delay condition.
- c. The Contractor shall notify the Contracting Officer, in writing, of the nature and extent of the excusable delay condition promptly after the commencement thereof, but in any event prior to outloading of the material from the storage location from which it is to be shipped. The Contractor shall notify the Contracting Officer, in writing, within ten (10) calendar days when the excusable delay condition ceases to exist.

**G.11 Setoff of Funds (APR 96)**

The Contractor agrees that the Government may use all or a portion of any monies received by Government to satisfy, in whole or in part, any debt (e.g. delinquent payments, interest or storage charges), arising out of this or any other transaction.

**G.12 Indemnification Agreement (JUN 96)**

The Contractor shall save and hold harmless and indemnify the government against any and all liabilities, claims, and costs of whatsoever kind and nature for injury to or death of any person or persons and for loss or damage to any property (Government or otherwise) occurring in conjunction with or in anyway incident to or arising out of the occupancy, use, service, operations, or performance of work in connection with the contract. Whether due to negligence or not of the Contractor, the Contractor agrees to defend any and all claims or suits against the United States, whether well founded or not, in any way whatsoever alleged to have arisen from or been connected with performance of this contract and to reimburse the United States for any legal expenses (including salaries of attorneys) incurred by the United States in defending such suits.

**G.13 Covenant Against Contingent Fees (JAN 95)**

- a. The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. For breach or violation of this warranty, the Government shall have the right to annul this contract without liability or, in its discretion, to add to the contract price or consideration, or otherwise recover, the full amount of the contingent fee.
- b. "Bona fide agency," as used in this paragraph, means an established commercial or selling agency, maintained by a Contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.
- c. "Bona fide employee," as used in the paragraph, means a person, employed by a Contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.
- d. "Contingent fee," as used in this paragraph, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.
- e. "Improper influence," as used in this paragraph, means any influence that induces or tends to induce a Government employee or office to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

**SECTION H – DEFINITIONS (JUN 95)**

As used throughout this Agreement, the following terms shall have the meaning set forth below:

- a. The term “Contracting Officer” means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings.
- b. The term “small business concern” for the purpose of this Agreement, is a concern including its affiliates, which is independently owned and operated, is not dominant in the field of operation in which it is offering on Government contracts, and qualified as a small business under the criteria and size standards in 13 CFR Part 121.
- c. The terms “Quoter”, “Purchaser”, or “Contractor” may be used interchangeably.

**SECTION I – SUBMITTALS**

**COMPLETE AND RETURN THE FOLLOWING:**

Basic Order Agreement Cover Page

- I.1 Confirmation of Quotation
- I.2 Shopping List
- I.3 Certificate of Independent Price Determination (JUL 97)
- I.4 Certification Regarding Debarment, Suspension, Proposed Debarment, Environmental Compliance, and Other Responsibility Matters (JUL 97)
- I.5 Type of Business Organization (APR 96)
- I.6 Small Business Concern Certification (JAN 95)
- I.7 Clean Air and Water Certification (JUN 95)
- I.8 Persons Authorized to Request Shipment of Material (FEB 98)
- I.9 Contractor's Billing Address (JUL 96)

**I.1 Confirmation of Quotation**

CONFIRMATION OF QUOTATION UNDER DLA-PLATINUM GROUP METALS-001		CONTRACT NUMBER		PAGE 1 of	
FROM: _____ _____ _____ _____		TO: DEFENSE NATIONAL STOCKPILE CENTER ATTN: PLATINUM METALS GROUP, DNSC-P2 8725 JOHN J. KINGMAN ROAD, SUITE 4616 FORT BELVOIR, VA 22060 FAX: (703) 767-5494			
DATE OF QUOTE:	PLEASE FAX QUOTE TO THE FOLLOWING NUMBER: <b>(703) 767-5541</b>		INVOICE/PAYMENTS TO: ATTN: DNSC-DF, ACCOUNTS RECEIVABLE DEFENSE NATIONAL STOCKPILE CENTER 8725 JOHN J. KINGMAN, SUITE 4616 FORT BELVOIR, VA 22060		
This contract is entered into by and between the United States of America, hereinafter called the "Government," represented by the Contracting Officer executing this contract and the Contractor identified below. The Government agrees to sell and the Contractor agrees to buy the material described below in accordance with the terms and conditions of the Basic Ordering Agreement (BOA), DLA-PLATINUM GROUP METALS-001. In the event of a conflict between the terms of the BOA and the Sales Contract, the terms of the Sales Contract govern.					
ITEM	PROPERTY DESCRIPTION AND LOCATION	QUANTITY (No. of Units)	UNIT	UNIT PRICE	TOTAL
	<b>CONTRACTOR QUOTE:</b>				
	<b>AWARD BY THE GOVERNMENT</b>				
CONTRACT PERIOD EXPIRES ON:					
EXECUTION BY CONTRACTOR			ACCEPTANCE BY GOVERNMENT		
DATE (Day, Month, Year)			UNITED STATES OF AMERICA BY:		DATE:
NAME/SIGNATURE OF CONTRACTOR					
SIGNATURE AND TITLE OF PERSON AUTHORIZED TO SIGN THIS QUOTE (Type or print name and title under signature)			NAME AND TITLE OF CONTRACTING OFFICIAL		
Telephone Number: _____			Name: _____		
Facsimile Number: _____			Title: _____		

**PLATINUM**

FY 99 AMP: 100,000 tr oz

<i>ItemSeries</i>	<i>Description</i>	<i>Contract No.</i>	<i>Weight</i>	<i>%Pt</i>	<i>Supplier</i>	<i>Comments</i>
1000	Pt sponge	SPO833-97-C-0107	2,540.449	99.95	Sabin	6 jrs/bx; approx. 100 tr oz/jr
2000	Pt ingots	GS-00-DS-(P)-94011	23,891.860	99.95	Engelhard	1 ingot/box: 595.430 - 599.320 tr oz
3000	Pt ingots	BSD-SM-73-2 (BSD-SM-61-73-1)	49,999.442	99.9	Johnson Matthey	2-4 ingots/bx: appr 330 tr oz ea.
4000	Pt ingots	GS-00P-10538 (FM-SM-54-12)	4,999.783	99.5	Baker/Philipp Br.	1 ingot/box: 478.815 tr oz - 503.490 tr oz
5000	Pt ingots	GS-00P-10292	1,504.393	99.5	Baker	1 ingot/box: approx 500 tr oz ea
6000	Pt ingots	GS-00P-10119	16,081.487	99.5	Baker	1 ingot/box: approx 500 tr oz ea
7000	Pt ingots	GS-00P-10028	6,487.059	99.5	Baker	1 ingot/box: approx 500 tr oz ea
8000	Pt ingots	GS-00P-10745 (FM-SM-54-29)	3,459.313	99.5	Baker	1 ingot/box: approx 500 tr oz ea exc 1 bx w/approx 433 tr oz
9000	Pt ingots	(FM-SM-54-48)	9,025.915			1 ingot/box: approx 500 tr oz ea

117,989.701

**PALLADIUM**  
FY 99 AMP: 150,000 tr oz

<i>Item Series</i>	<i>Description</i>	<i>Contract No.</i>	<i>Weight</i>	<i>%Pd</i>	<i>Supplier</i>	<i>Comments</i>
1000	Pd sponge	GS-00S-25864	9,998.790	99.95	Engelhard	6 jars/box; appr 50 tr oz/jar exc 2 bx = (1 jar/bx)
2000	Pd bars	GS-00-DS(P)-94016	10,730.777	99.95	Engelhard	6 brs/bx:78.442-102.863 tr oz ea bx total: 509.455-560.665 tr oz
3000	Pd ingots	GS-00-DS(P)-85018	7,687.724	99.95	Engelhard	1 ingot/box: 542.210 - 563.290 tr oz
4000	Pd ingots	OBS-SM-66-71-1	24,981.875	99.8	Engelhard/Philipp Br.	1 ingot/box: 523.070 - 554.899 tr oz
5000	Pd ingots	OBS-SM-66-71-3	25,213.191	99.8	Engelhard/Philipp Br.	1 ingot/box: 519.110 - 533.330 tr oz
6000	Pd ingots	OBS-SM-66-71-4	24,165.886	99.8	Engelhard/Philipp Br.	1 ingot/box: 513.210 - 536.100 tr oz
7000	Pd ingots	GC-BSD-60-CS-127 (BSD-SM-59-115)	23,976.010	99.8	Engelhard/W.R.G.	6 ingots/box: 590.210- 606.070 tr oz/box (exc 1 bx = 189.590 tr oz)
8000	Pd ingots	GS-00P-18089 (BSD-SM-56-34-2)	14,986.976	99.8	Baker/Philipp Br.	1 ingot/box: approx 400 tr oz ea exc 1 bx w/approx 211 tr oz
9000	Pd plates	BSD-SM-56-16 (SCM-SUPP-57-31)	25,004.649	99.8	Johnson Matthey	9-18 plates/box; approx. 90-100 tr oz ea.

166,745.878
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**IRIDIUM**

FY 99 AMP: 4,450 tr oz

<i>Item Series</i>	<i>Description</i>	<i>Contract No.</i>	<i>Weight</i>	<i>%Ir</i>	<i>Supplier</i>	<i>Comments</i>
1000	Ir sponge	GS-0082-DxxA-0005	600.000	99.95	Johnson Matthey	6 jars/box; 100 tr oz/jar
2000	Ir sponge	GS-00-D-87-AP-A-0001	3,000.000	99.95	Engelhard	6 jars/box; 100 tr oz/jar
			3,600.000			
3000	Ir powder	GS-00S-25858	479.558	99.9	Gray International	5 jars: 2@160 tr oz; 1@80 tr oz; 1@7.028 tr oz; 1@72.53 tr oz
4000	Ir powder	GS-00P-3268	99.661	99.58	J.A.Samuel	
5000	Ir powder	GS-00P-3253	500.000	99.85	Baker	
6000	Ir powder	GS-00P-3178	99.202	99.50	J.A.Samuel	
7000	Ir powder	GS-00P-2942	199.575	99.69	Jos.B.Cooper	
			1,377.996			
			4,977.996			



**I.3 Certificate of Independent Price Determination (JUL 97)**

- a. The Contractor certifies that:
- (1) The prices in each quote have been arrived at independently, without, for the purpose of restricting competition, any consultation, communication, or agreement with any other quoter or competitor relating to (i) each quote, (ii) the intention to submit a quote, or (iii) the methods or factors used to calculate the price quoted;
  - (2) The prices in each quote have not been and will not be knowingly disclosed by the quoter, directly or indirectly, to any other quoter or competitor before contract award unless otherwise required by law; and
  - (3) No attempt has been made or will be made by the quoter to induce any other concern to submit or not to submit a quote for purposes of restricting competition.
- b. Each signature on the quote is considered to be a certification by the signatory that the signatory:
- (1) Is the person in the quoter's organization responsible for determining the prices being quoted, and that the signatory has not participated and will not participate in any action contrary to subparagraph a.(1) through a.(3) above; or
  - (2)(i) Has been authorized, in writing, to act as agent for the following principals in certifying that those principals have not participated, and will not participate in any action contrary to subparagraphs a.(1) through a.(3), above
- 
- (insert full name of person(s) in the quoter's organization responsible for determining the quotes offered, and the title of his or her position in the quoter's organization)
- (ii) As an authorized agent, does certify that the principals named in subdivision b.(2)(i) above have not participated, and will not participate, in any action contrary to subparagraphs a.(1) through a.(3) above; and
  - (iii) As an agent, has not personally participated, and will not participate, in any action contrary to subparagraphs a.(1) through a.(3) above.
- c. If the quoter deletes or modifies subparagraph a.(2) above, the quoter must furnish with its Agreement a signed statement setting forth in detail the circumstances of the disclosure.

**I.4 Certification Regarding Debarment, Suspension, Proposed Debarment, Environmental Compliance and Other Responsibility Matters (JUL 97)**

- a. (1) The Contractor certifies, to the best of its knowledge and belief, that –
- (i) The Contractor and/or any of its Principals –
    - (A) Are (\_\_\_\_) are not (\_\_\_\_) presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;
    - (B) Have (\_\_\_\_) have not (\_\_\_\_), within a three-year period preceding this Agreement, been convicted of or had a civil judgement rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of quotes, or commission of embezzlement, theft, forgery, bribery, falsification or destruction of record, making false statement, or receiving stolen property; and
    - (C) Are (\_\_\_\_) are not (\_\_\_\_) presently indicted for, or otherwise criminally or civilly charged by a government entity with, commission of any of the offenses enumerated in subdivision a.(1)(i)(B) of this provision.
    - (D) Are (\_\_\_\_) are not (\_\_\_\_) presently indicted for or otherwise criminally or civilly charged by a Federal, state or local entity with violation of any environmental laws;
    - (E) Have (\_\_\_\_) have not (\_\_\_\_) within the three-year period preceding this Agreement, been convicted of or had a civil judgement rendered against them for violation of a Federal, state or local environmental statute or regulation.
  - (ii) The Contractor has (\_\_\_\_) has not (\_\_\_\_), within a three-year period preceding this Agreement, had one or more contracts terminated for default by any Federal agency.
- (2) “Principals,” for the purposes of this certification, means officers, directors, owners, partners, and persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).
- (3) If the Contractor answers affirmatively to anything in a.(1), above, the Contractor shall include in its Agreement an explanation of the circumstances, including the outcome.

This certification concerns a matter within the jurisdiction of an agency of the United States and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under section 1001, title 18, United States Code.

- b. The Contractor shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Contractor learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- c. A certification that any of the items in paragraph a. of this provision exists will not necessarily result in withholding of an award under this Agreement. However, the certification will be considered in connection with a determination of the Contractor's responsibility. Failure of the Contractor to furnish a certification or provide such additional information as requested by the Contracting officer may render the Contractor nonresponsible.
- d. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith, the certification required by paragraph a. of this provision. The knowledge and information of a Contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- e. The certification in paragraph a. of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Contractor knowingly rendered an erroneous certification, in addition to the other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this Agreement for default.

## **I.5 Type of Business Organization (APR 96)**

The Contractor represents that –

- a. It operates as ( ) a corporation incorporated under the laws of the State of \_\_\_\_\_, ( ) an individual, ( ) a partnership, ( ) a nonprofit organization, or ( ) a joint venture.
- b. If the Contractor is a foreign entity, it operates as ( ) an individual, ( ) a partnership, ( ) a nonprofit organization, ( ) a joint venture, or ( ) a corporation registered for business in \_\_\_\_\_ (country)
- c. If the Contractor is a corporation, it is ( ) independent (not owned or controlled by another company), ( ) owned or controlled by \_\_\_\_\_ corporation company registered for business in \_\_\_\_\_ (state/country).
- d. If the Contractor is owned or controlled by another, state the relationship (e.g., wholly owned subsidiary, etc.): \_\_\_\_\_

- e. The Contractor agrees to provide additional information relating to the above representations if requested to do so by the Contracting Officer.

**I.6 Small Business Certification (JAN 95)**

The Contractor represents and certifies as part of its Agreement that it \_\_\_\_ is, \_\_\_\_ is not a small business concern (See Section H.b for the definition of a small business concern.)

**I.7 Clean Air and Water Certification (JUN 95)**

- a. The Contractor certifies that it is \_\_\_\_ is not \_\_\_\_ listed on the Environmental Protection Agency (EPA ) List of Violating Facilities and that it will not knowingly resell this material to any company that is on the EPA list; and
- b. The Contractor will immediately notify the Contracting Officer, before award, of the receipt of any communication from EPA indicating that any facility at which the Contractor plans to use material purchased under this Agreement is under consideration to be listed on the EPA List of Violating Facilities.

**I.8 Persons Authorized to Request Shipment of Material (JUL 95)**

The Contractor shall provide the name(s), title(s), signature(s), and telephone number(s) of representative(s) authorized to sign Section J.2 Shipping Instructions:

\_\_\_\_\_  
Typed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Telephone

\_\_\_\_\_  
Typed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Telephone

\_\_\_\_\_  
Typed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Telephone

**I.9 Contractor's Billing Address (JUL 96)**

The Contractor shall provide its billing address and billing facsimile number below, if different from the address in Section I.1 Confirmation of Quotation.

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**SECTION J – LIST OF ATTACHMENTS**

**J.1 Storage Location, Operations and Logistics Division, and Quality Assurance and Technical Services Division**

**J.2 Shipping Instructions**

**J.3 Fedwire Procedures**

**J.4 Material Safety Data Sheet**

**J.1 Storage Location, Operations and Logistics Division, and Quality Assurance and Technical Services Division**

Storage location is:

Somerville Depot  
152 U.S. Highway 206 South  
Somerville, NJ 08876-6400  
Attention: James Farley  
Phone #: (908) 707-4356  
Fax #: (908) 707-4350

Operations Office:

Mr. Melvin Lee  
Defense National Stockpile Center  
Operations and Logistics Division  
8725 John J Kingman Road, Suite 4528  
Ft. Belvoir, VA 22060-6223  
Phone #: (703) 767-7614  
Fax #: (703) 767-7608

Quality Assurance and Technical Services Division:

Dr. Russell J. Foster  
Defense National Stockpile Center  
Quality Assurance and Technical Services Division  
8725 John J Kingman Road, Suite 4528  
Ft. Belvoir, VA 22060-6223  
Phone #: (703) 767-7619  
Fax #: (703) 767-7716

**The material is stored at Somerville, NJ depot. The hours of operations for outloading at Somerville are 7:00 a.m. to 3:00 p.m. Monday through Friday.**

Shipping Request Number: \_\_\_\_\_

## J. 2 SHIPPING INSTRUCTIONS

1. a. Contractor: \_\_\_\_\_

b. Point of Contact: \_\_\_\_\_ c. Telephone No.: \_\_\_\_\_

2. a. DNSC Contract No.: \_\_\_\_\_ b. Commodity: \_\_\_\_\_

3. Item/Pile: \_\_\_\_\_

4. Depot: \_\_\_\_\_

5. a. Quantity: \_\_\_\_\_

b. Unit Price: \_\_\_\_\_ c. Total Dollar Value: \_\_\_\_\_

6. Shipping Method: \_\_\_\_\_

7. a. Carrier Name: \_\_\_\_\_

b. Point of Contact: \_\_\_\_\_ c. Telephone No.: \_\_\_\_\_

8. Date Shipment Desired: \_\_\_\_\_

9. Ship To: \_\_\_\_\_

10. Minimum Load: \_\_\_\_\_

11. a. Outloader: \_\_\_\_\_ b. Telephone No.: \_\_\_\_\_

12. a. Sampler: \_\_\_\_\_ b. Telephone No.: \_\_\_\_\_

13. Copy of Payment Attached: Yes \_\_\_\_\_ No \_\_\_\_\_

14. Remarks: \_\_\_\_\_

15. Contractor's Signature: \_\_\_\_\_

Date

Telephone

16. Shipment Approved and Authorized: \_\_\_\_\_

Contracting Officer

Date



### J.3 FEDWIRE PROCEDURES

The Sender should use a bank that offers wire transfer capability. The Federal Reserve Bank of New York will then process the money for deposit to the Defense National Stockpile Account with the Department of the Treasury.

#### **PROCEDURES FOR DEPOSIT SLIP(S) FOR FEDWIRE:**

To ensure the funds are credited to the Defense National Stockpile Center the following information is required on any wire transfer of funds.

1. Treasury Dept. Code – Routing No. to the Treasury  
MUST BE ON SLIP “021030004”.

2. Amount of funds to be transferred.

3. Treasury Department Name – **This item is critical** –

MUST APPEAR EXACTLY AS SHOWN BELOW

**TREAS NYC/(CTR/BNF=/AC-00006355)**

4. Third Party Information – Purchaser’s Name,  
Commodity, and Contract Number

## J.4 Material Safety Data Sheets

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SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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DEFENSE LOGISTICS AGENCY  
DEFENSE NATIONAL STOCKPILE CENTER  
8725 JOHN J. KINGMAN ROAD  
SUITE 3339  
FORT BELVOIR, VA 22060-6223

EMERGENCY TELEPHONE NUMBER:  
1-800-424-9300 (NORTH AMERICA)  
1-703-527-3887 (INTERNATIONAL)

SUBSTANCE: PLATINUM

TRADE NAMES/SYNONYMS:

PLATINUM BLACK; PLATINUM SPONGE; C.I. 77795; LIQUID BRIGHT PLATINUM;  
PLATINUM ELEMENT; PT; DLA19021; RTECS TP2160000

CHEMICAL FAMILY: metal

CREATION DATE: Mar 24 1995  
REVISION DATE: Dec 09 1997

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SECTION 2 COMPOSITION, INFORMATION ON INGREDIENTS

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COMPONENT: PLATINUM  
CAS NUMBER: 7440-06-4  
EC NUMBER (EINECS): 231-116-1  
PERCENTAGE: 100

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SECTION 3 HAZARDS IDENTIFICATION

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NFPA RATINGS (SCALE 0-4): HEALTH=1 FIRE=0 REACTIVITY=0

EC CLASSIFICATION (CALCULATED): No classification assigned.

EMERGENCY OVERVIEW:

PHYSICAL DESCRIPTION: White to silver-gray, lustrous, malleable, ductile metal in pig, ingot or tub form.

MAJOR HEALTH HAZARDS: No significant target effects reported.

PHYSICAL HAZARDS: Dust/air mixtures may ignite or explode.

POTENTIAL HEALTH EFFECTS:

INHALATION:

SHORT TERM EXPOSURE: difficulty breathing

LONG TERM EXPOSURE: no information is available

SKIN CONTACT:

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SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: no information is available

EYE CONTACT:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: no information is available

INGESTION:

SHORT TERM EXPOSURE: no information is available

LONG TERM EXPOSURE: no information is available

CARCINOGEN STATUS:

OSHA: N

NTP: N

IARC: N

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-  
SECTION 4        FIRST AID MEASURES  
-----  
-

INHALATION: Remove from exposure immediately. Use a bag valve mask or similar device to perform artificial respiration (rescue breathing) if needed. Get medical attention.

SKIN CONTACT: Remove contaminated clothing, jewelry, and shoes immediately. Wash with soap or mild detergent and large amounts of water until no evidence of chemical remains (at least 15-20 minutes). Get medical attention, if needed.

EYE CONTACT: Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains. Get medical attention immediately.

INGESTION: If vomiting occurs, keep head lower than hips to help prevent aspiration. Get medical attention, if needed.

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-  
SECTION 5        FIRE FIGHTING MEASURES  
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-

FIRE AND EXPLOSION HAZARDS: Negligible fire and explosion hazard in bulk form. Dust/air mixtures may ignite or explode.

EXTINGUISHING MEDIA: dolomite, dry powder for metal fires, sand, graphite, soda ash, sodium chloride

Do not get water directly on material.

FIRE FIGHTING: Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. For fires in cargo or storage area: Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. If this is impossible then take the following precautions: Keep unnecessary people away, isolate hazard area and deny

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entry. Let the fire burn. Use extinguishing agents appropriate for surrounding fire. Avoid inhalation of material or combustion by-products.

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SECTION 6 ACCIDENTAL RELEASE MEASURES

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OCCUPATIONAL RELEASE:

Collect spilled material in appropriate container for disposal.

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SECTION 7 HANDLING AND STORAGE

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Store and handle in accordance with all current regulations and standards. Keep separated from incompatible substances.

---

SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

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EXPOSURE LIMITS:

PLATINUM:

- 1 mg/m3 OSHA TWA (vacated by 58 FR 35338, June 30, 1993)
- 1 mg/m3 ACGIH TWA
- 1 mg/m3 NIOSH recommended TWA 10 hour(s)
- 1 mg/m3 EC MAK (total dust)
- 5 mg/m3 UK OES TWA

MEASUREMENT METHOD: Particulate filter; Acids; Inductively coupled plasma; NIOSH III # 7300, Elements

VENTILATION: Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

EYE PROTECTION: Eye protection not required under normal conditions.

CLOTHING: Protective clothing is not required under normal conditions.

GLOVES: Wear appropriate chemical resistant gloves.

RESPIRATOR: Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use.

Any dust, mist, and fume respirator.

Any air-purifying respirator with a high-efficiency particulate filter.

Any powered, air-purifying respirator with a dust, mist, and fume filter.

Any powered, air-purifying respirator with a high-efficiency particulate filter.

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For Unknown Concentrations or Immediately Dangerous to Life or Health -

Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply.

Any self-contained breathing apparatus with a full facepiece.

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-  
SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES  
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-

PHYSICAL DESCRIPTION: White to silver-gray, lustrous, malleable, ductile metal in pig, ingot or tub form.

MOLECULAR WEIGHT: 195.09

MOLECULAR FORMULA: PT

BOILING POINT: 6921 F (3827 C)

MELTING POINT: 3222 F (1772 C)

VAPOR PRESSURE: Not applicable

VAPOR DENSITY: Not applicable

SPECIFIC GRAVITY (water=1): 21.45 @ 20 C

WATER SOLUBILITY: insoluble

PH: Not applicable

VOLATILITY: Not applicable

ODOR THRESHOLD: Not available

EVAPORATION RATE: Not applicable

COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available

SOLVENT SOLUBILITY:

Soluble: aqua regia, fused alkali

Insoluble: alcohol, organic & inorganic acids, alkali

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-  
SECTION 10 STABILITY AND REACTIVITY  
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-

REACTIVITY: Stable at normal temperatures and pressure.

CONDITIONS TO AVOID: None reported.

INCOMPATIBILITIES: bases, metals, halogens, cyanides, combustible materials, reducing agents, peroxides, acids

PLATINUM:

ALKALIS: May corrode.

ALUMINUM: Thin layers of platinum on aluminum wire or foil may be used as igniters due to the intense heat of alloy formation, which is sufficient to

melt the intermetallic compounds.

ARSENIC: Exothermic reaction at 270 C.

BROMINE TRIFLUORIDE: Attacked in the presence of potassium fluoride.

CYANIDES: May corrode.

DIOXYGEN DIFLUORIDE: Explosive reaction with fluoridated platinum.

ETHANOL: Ignition reaction.

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HALOGENS: May corrode.  
HYDRAZINE: Decomposes; violent reaction with concentrated solution.  
HYDROGEN IN AIR: May cause explosive reaction.  
HYDROGEN PEROXIDE: Explosive reaction.  
LITHIUM: Violent reaction at 520-560 C.  
METHANOL + CARBON: Ignition with platinum-on-carbon catalyst.  
METHYL HYDROPEROXIDE: Shock sensitive and highly explosive, especially on warming.  
NITROSYL CHLORIDE + ACETONE: Explosive reaction on warming.  
PEROXOMONOSULFURIC ACID: Explosive decomposition on contact.  
PHOSPHORUS: Incandescent reaction.  
SELENIUM: Incandescent reaction.  
SULFUR: May corrode.  
TELLURIUM: Incandescent reaction.  
VANADIUM DICHLORIDE IN WATER: Violent reaction on contact with the metal foil.

## HAZARDOUS DECOMPOSITION:

Thermal decomposition products: miscellaneous decomposition products

POLYMERIZATION: Will not polymerize.

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-  
SECTION 11      TOXICOLOGICAL INFORMATION  
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-

## PLATINUM:

## TOXICITY DATA:

9100 mg/kg/26 week(s) intermittent oral-rat TDLo

## TUMORIGENIC DATA:

5250 mg/kg implant-rat TDLo; 23 gm/kg implant-mouse TDLo

## ADDITIONAL DATA: May cross the placenta.

Nephrotoxicity has been demonstrated with excessive exposure to platinum.

## HEALTH EFFECTS:

## INHALATION:

## ACUTE EXPOSURE:

PLATINUM: Inhalation of platinum dust may produce symptoms of irritation, coughing, wheezing, and difficulty breathing.

## CHRONIC EXPOSURE:

PLATINUM: No data available.

## SKIN CONTACT:

## ACUTE EXPOSURE:

PLATINUM: May cause irritation. Sensitization dermatitis may occur in previously exposed persons.

## CHRONIC EXPOSURE:

PLATINUM: No data available.

## EYE CONTACT:

## ACUTE EXPOSURE:

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PLATINUM: May cause irritation. Finely divided platinum or platinum black is tolerated in the anterior chamber of rabbit eyes.

## CHRONIC EXPOSURE:

PLATINUM: No data available.

## INGESTION:

## ACUTE EXPOSURE:

PLATINUM: No data available.

## CHRONIC EXPOSURE:

PLATINUM: No data available.

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-  
SECTION 12 ECOLOGICAL INFORMATION  
-----  
-

Not available

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-  
SECTION 13 DISPOSAL CONSIDERATIONS  
-----  
-

Dispose in accordance with all applicable regulations.

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-  
SECTION 14 TRANSPORT INFORMATION  
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-

No classification assigned.

LAND TRANSPORT ADR/RID: No classification assigned.

AIR TRANSPORT IATA/ICAO: No classification assigned.

MARITIME TRANSPORT IMDG: No classification assigned.

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-  
SECTION 15 REGULATORY INFORMATION  
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-

## U.S. REGULATIONS:

TSCA INVENTORY STATUS: Y

TSCA 12(b) EXPORT NOTIFICATION: Not listed.

CERCLA SECTION 103 (40CFR302.4): N

SARA SECTION 302 (40CFR355.30): N

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SARA SECTION 304 (40CFR355.40): N

SARA SECTION 313 (40CFR372.65): N

SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21):

ACUTE: N

CHRONIC: N

FIRE: N

REACTIVE: N

SUDDEN RELEASE: N

OSHA PROCESS SAFETY (29CFR1910.119): N

STATE REGULATIONS:

California Proposition 65: N

EUROPEAN REGULATIONS:

EC NUMBER (EINECS): 231-116-1

GERMAN REGULATIONS:

WATER HAZARD CLASS (WGK): 0 (Official German Classification)

WATER HAZARD CLASS (WGK): 0 (Self Classification by Manufacturers and  
Distributors)

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SECTION 16 OTHER INFORMATION

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-  
SECTION 1        CHEMICAL PRODUCT AND COMPANY IDENTIFICATION  
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DEFENSE LOGISTICS AGENCY  
DEFENSE NATIONAL STOCKPILE CENTER  
8725 JOHN J. KINGMAN ROAD  
SUITE 3339  
FORT BELVOIR, VA 22060-6223

EMERGENCY TELEPHONE NUMBER:  
1-800-424-9300 (NORTH AMERICA)  
1-703-527-3887 (INTERNATIONAL)

SUBSTANCE: PALLADIUM

TRADE NAMES/SYNONYMS:  
PALLADIUM ELEMENT; Pd; DLA17978

CHEMICAL FAMILY: metal

CREATION DATE: Mar 28 1995  
REVISION DATE: Dec 09 1997

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SECTION 2        COMPOSITION, INFORMATION ON INGREDIENTS  
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-

COMPONENT: PALLADIUM  
CAS NUMBER: 7440-05-3  
EC NUMBER (EINECS): 231-115-6  
PERCENTAGE: 100.0

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-  
SECTION 3        HAZARDS IDENTIFICATION  
-----  
-

NFPA RATINGS (SCALE 0-4): HEALTH=1 FIRE=0 REACTIVITY=0

EC CLASSIFICATION (CALCULATED): No classification assigned.

## EMERGENCY OVERVIEW:

PHYSICAL DESCRIPTION: Odorless, silver-white, ductile metal in pig, ingot or tub form.

MAJOR HEALTH HAZARDS: No significant target effects reported.

PHYSICAL HAZARDS: Dust/air mixtures may ignite or explode.

## POTENTIAL HEALTH EFFECTS:

## INHALATION:

SHORT TERM EXPOSURE: no information is available

LONG TERM EXPOSURE: no information is available

## SKIN CONTACT:

SHORT TERM EXPOSURE: no information on significant adverse effects

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LONG TERM EXPOSURE: no information is available

EYE CONTACT:

SHORT TERM EXPOSURE: no information is available

LONG TERM EXPOSURE: no information is available

INGESTION:

SHORT TERM EXPOSURE: no information on significant adverse effects

LONG TERM EXPOSURE: no information on significant adverse effects

CARCINOGEN STATUS:

OSHA: N

NTP: N

IARC: N

---

SECTION 4 FIRST AID MEASURES

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INHALATION: Remove from exposure immediately. Use a bag valve mask or similar device to perform artificial respiration (rescue breathing) if needed. Get medical attention.

SKIN CONTACT: Remove contaminated clothing, jewelry, and shoes immediately. Wash with soap or mild detergent and large amounts of water until no evidence of chemical remains (at least 15-20 minutes). Get medical attention, if needed.

EYE CONTACT: Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains. Get medical attention immediately.

INGESTION: If vomiting occurs, keep head lower than hips to help prevent aspiration. Get medical attention, if needed.

---

SECTION 5 FIRE FIGHTING MEASURES

---

FIRE AND EXPLOSION HAZARDS: Negligible fire and explosion hazard in bulk form. Dust/air mixtures may ignite or explode.

EXTINGUISHING MEDIA: dolomite, dry powder for metal fires, sand, graphite, soda ash, sodium chloride

Do not get water directly on material.

FIRE FIGHTING: Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. For fires in cargo or storage area: Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. If this is impossible then take the following precautions: Keep unnecessary people away, isolate hazard area and deny entry. Let the fire burn. Use extinguishing agents appropriate for

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surrounding fire. Avoid inhalation of material or combustion by-products.

---

SECTION 6 ACCIDENTAL RELEASE MEASURES

---

OCCUPATIONAL RELEASE:

Collect spilled material in appropriate container for disposal.

---

SECTION 7 HANDLING AND STORAGE

---

Store and handle in accordance with all current regulations and standards.  
Keep separated from incompatible substances.

---

SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

---

EXPOSURE LIMITS:

PALLADIUM:

No occupational exposure limits established.

VENTILATION: Provide local exhaust ventilation system. Ensure compliance  
with applicable exposure limits.

EYE PROTECTION: Eye protection not required under normal conditions.

CLOTHING: Protective clothing is not required under normal conditions.

GLOVES: Wear appropriate chemical resistant gloves.

RESPIRATOR: Under conditions of frequent use or heavy exposure, respiratory  
protection may be needed. Respiratory protection is ranked in order from  
minimum to maximum. Consider warning properties before use.

Any dust, mist, and fume respirator.

Any air-purifying respirator with a high-efficiency particulate filter.

Any powered, air-purifying respirator with a dust, mist, and fume filter.

Any powered, air-purifying respirator with a high-efficiency particulate  
filter.

For Unknown Concentrations or Immediately Dangerous to Life or Health -

Any supplied-air respirator with full facepiece and operated in a  
pressure-demand or other positive-pressure mode in combination with a  
separate escape supply.

Any self-contained breathing apparatus with a full facepiece.

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## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

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-

PHYSICAL DESCRIPTION: Odorless, silver-white, ductile metal in pig, ingot or tub form.

MOLECULAR WEIGHT: 106.42

MOLECULAR FORMULA: Pd

BOILING POINT: 5378 F (2970 C)

MELTING POINT: 2829 F (1554 C)

VAPOR PRESSURE: Not applicable

VAPOR DENSITY: Not applicable

SPECIFIC GRAVITY (water=1): 12.02

WATER SOLUBILITY: insoluble

PH: Not applicable

VOLATILITY: Not applicable

ODOR THRESHOLD: Not available

EVAPORATION RATE: Not applicable

COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available

SOLVENT SOLUBILITY:

Soluble: aqua regia, nitric acid, sulfuric acid, fused alkali

Slightly Soluble: hydrochloric acid

Insoluble: organic acids

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-

## SECTION 10 STABILITY AND REACTIVITY

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-

REACTIVITY: Stable at normal temperatures and pressure.

CONDITIONS TO AVOID: None reported.

INCOMPATIBILITIES: metals, combustible materials, acids, peroxides, oxidizing materials, metal salts

PALLADIUM:

ALUMINUM: Violent reaction at 600 C releasing light and heat (2800 C).

ARSENIC: Violent reaction on heating releasing light and heat.

CARBON: May result in the formation of pyrophoric catalyst.

FORMIC ACID: Violent reaction releasing hydrogen gas.

HYDROCHLORIC ACID: Reacts.

HYDROGEN GAS + ISOPROPYL ALCOHOL: Ignition.

HYDROGEN PEROXIDE: Explosive.

METHANOL: Hazardous reaction.

NITRIC ACID: Reacts.

OXIDIZERS (STRONG): Fire and explosion hazard.

OXYGEN DIFLUORIDE: Incandescence on heating.

OZONIDES: Explosive decomposition.

SODIUM TETRAHYDROBORATE: May cause ignition of liberated hydrogen.

SULFUR: Incandescence and ignition.

SULFURIC ACID: Reacts.

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## HAZARDOUS DECOMPOSITION:

Thermal decomposition products: miscellaneous decomposition products

POLYMERIZATION: Will not polymerize.

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-  
SECTION 11 TOXICOLOGICAL INFORMATION  
-----  
-

## HEALTH EFFECTS:

## INHALATION:

## ACUTE EXPOSURE:

PALLADIUM: No data available.

## CHRONIC EXPOSURE:

PALLADIUM: No data available.

## SKIN CONTACT:

## ACUTE EXPOSURE:

PALLADIUM: Sensitization dermatitis may occur in previously exposed persons.

## CHRONIC EXPOSURE:

PALLADIUM: No data available.

## EYE CONTACT:

## ACUTE EXPOSURE:

PALLADIUM: No data available.

## CHRONIC EXPOSURE:

PALLADIUM: No data available.

## INGESTION:

## ACUTE EXPOSURE:

PALLADIUM: Palladium is poorly absorbed by the body when ingested.

## CHRONIC EXPOSURE:

PALLADIUM: Mice given 5 ppm palladium as  $\text{PdCl}_2$  in drinking water for their lifetime showed reduced growth rate. A slight carcinogenic effect was noted.

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SECTION 12 ECOLOGICAL INFORMATION  
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Not available  
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## SECTION 13 DISPOSAL CONSIDERATIONS

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Dispose in accordance with all applicable regulations.

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## SECTION 14 TRANSPORT INFORMATION

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No classification assigned.

LAND TRANSPORT ADR/RID: No classification assigned.

AIR TRANSPORT IATA/ICAO: No classification assigned.

MARITIME TRANSPORT IMDG: No classification assigned.

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## SECTION 15 REGULATORY INFORMATION

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-

## U.S. REGULATIONS:

TSCA INVENTORY STATUS: Y

TSCA 12(b) EXPORT NOTIFICATION: Not listed.

CERCLA SECTION 103 (40CFR302.4): N

SARA SECTION 302 (40CFR355.30): N

SARA SECTION 304 (40CFR355.40): N

SARA SECTION 313 (40CFR372.65): N

SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21):

ACUTE: N

CHRONIC: N

FIRE: N

REACTIVE: N

SUDDEN RELEASE: N

OSHA PROCESS SAFETY (29CFR1910.119): N

## STATE REGULATIONS:

California Proposition 65: N

## EUROPEAN REGULATIONS:

EC NUMBER (EINECS): 231-115-6

## GERMAN REGULATIONS:

WATER HAZARD CLASS (WGK): 0 (Official German Classification)

WATER HAZARD CLASS (WGK): 0 (Self Classification by Manufacturers and  
Distributors)

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SECTION 16      OTHER INFORMATION

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SECTION 1        CHEMICAL PRODUCT AND COMPANY IDENTIFICATION  
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DEFENSE LOGISTICS AGENCY  
DEFENSE NATIONAL STOCKPILE CENTER  
8725 JOHN J. KINGMAN ROAD  
SUITE 3339  
FORT BELVOIR, VA 22060-6223

EMERGENCY TELEPHONE NUMBER:  
1-800-424-9300 (NORTH AMERICA)  
1-703-527-3887 (INTERNATIONAL)

SUBSTANCE: IRIIDIUM

TRADE NAMES/SYNONYMS:  
Ir; DLA11466

CHEMICAL FAMILY: metal

CREATION DATE: Jul 01 1992  
REVISION DATE: Dec 09 1997

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SECTION 2        COMPOSITION, INFORMATION ON INGREDIENTS  
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COMPONENT: IRIIDIUM  
CAS NUMBER: 7439-88-5  
EC NUMBER (EINECS): 231-095-9  
PERCENTAGE: 100.00

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-  
SECTION 3        HAZARDS IDENTIFICATION  
-----  
-

NFPA RATINGS (SCALE 0-4): HEALTH=1 FIRE=3 REACTIVITY=0

EC CLASSIFICATION (CALCULATED): No classification assigned.

## EMERGENCY OVERVIEW:

PHYSICAL DESCRIPTION: Silver-white, dense, brittle, hard metal.

MAJOR HEALTH HAZARDS: No significant target effects reported.

PHYSICAL HAZARDS: Flammable solid. Dust/air mixtures may ignite or explode.

## POTENTIAL HEALTH EFFECTS:

## INHALATION:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: no information is available

## SKIN CONTACT:

SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: no information is available

## EYE CONTACT:



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SHORT TERM EXPOSURE: irritation

LONG TERM EXPOSURE: no information is available

INGESTION:

SHORT TERM EXPOSURE: no information is available

LONG TERM EXPOSURE: no information is available

CARCINOGEN STATUS:

OSHA: N

NTP: N

IARC: N

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-  
SECTION 4        FIRST AID MEASURES  
-----  
-

INHALATION: Remove from exposure immediately. Use a bag valve mask or similar device to perform artificial respiration (rescue breathing) if needed. Get medical attention.

SKIN CONTACT: Remove contaminated clothing, jewelry, and shoes immediately. Wash with soap or mild detergent and large amounts of water until no evidence of chemical remains (at least 15-20 minutes). Get medical attention, if needed.

EYE CONTACT: Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains. Get medical attention immediately.

INGESTION: If vomiting occurs, keep head lower than hips to help prevent aspiration. Get medical attention, if needed.

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-  
SECTION 5        FIRE FIGHTING MEASURES  
-----  
-

FIRE AND EXPLOSION HAZARDS: Negligible fire and explosion hazard in bulk form. Dust/air mixtures may ignite or explode.

EXTINGUISHING MEDIA: dolomite, dry powder for metal fires, sand, graphite, soda ash, sodium chloride

Do not get water directly on material.

FIRE FIGHTING: Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. For fires in cargo or storage area: Cool containers with water from unmanned hose holder or monitor nozzles until well after fire is out. If this is impossible then take the following precautions: Keep unnecessary people away, isolate hazard area and deny entry. Let the fire burn. Use extinguishing agents appropriate for surrounding fire. Avoid inhalation of material or combustion by-products.

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SECTION 6 ACCIDENTAL RELEASE MEASURES

---

OCCUPATIONAL RELEASE:

Clean up residue with a high-efficiency particulate filter vacuum.

---

SECTION 7 HANDLING AND STORAGE

---

Store and handle in accordance with all current regulations and standards.

---

SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

---

EXPOSURE LIMITS:

IRIDIUM:

No occupational exposure limits established.

VENTILATION: Provide local exhaust ventilation system. Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Ensure compliance with applicable exposure limits.

EYE PROTECTION: Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

CLOTHING: Wear appropriate chemical resistant clothing.

GLOVES: Wear appropriate chemical resistant gloves.

RESPIRATOR: Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use.

Any dust, mist, and fume respirator.

Any air-purifying respirator with a high-efficiency particulate filter.

Any powered, air-purifying respirator with a dust, mist, and fume filter.

Any powered, air-purifying respirator with a high-efficiency particulate filter.

For Unknown Concentrations or Immediately Dangerous to Life or Health -

Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply.

Any self-contained breathing apparatus with a full facepiece.

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## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

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-  
PHYSICAL DESCRIPTION: Silver-white, dense, brittle, hard metal.  
MOLECULAR WEIGHT: 192.22  
MOLECULAR FORMULA: Ir  
BOILING POINT: 7466-8132 F (4130-4500 C)  
MELTING POINT: 4370-4442 F (2410-2450 C)  
VAPOR PRESSURE: Not applicable  
VAPOR DENSITY: Not applicable  
SPECIFIC GRAVITY (water=1): 22.421  
WATER SOLUBILITY: insoluble  
PH: Not applicable  
VOLATILITY: Not applicable  
ODOR THRESHOLD: Not available  
EVAPORATION RATE: Not applicable  
COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available  
SOLVENT SOLUBILITY:  
    Very Slightly Soluble: aqua regia, fused alkali  
    Insoluble: acids, alcohols  
-----  
-

## SECTION 10 STABILITY AND REACTIVITY

-----  
-  
REACTIVITY: Stable at normal temperatures and pressure.

CONDITIONS TO AVOID: None reported.

INCOMPATIBILITIES: halogens, acids, metals

## IRIDIUM:

BROMINE PENTAFLUORIDE: Violent and vigorous reaction may occur.  
CHLORINE TRIFLUORIDE: Violent and vigorous reaction may occur.  
FLUORINE: Reacts vigorously at 260 C.  
PEROXYFORMIC ACID: Violent and vigorous reaction may occur.  
ZINC: Extraction of alloys with acids may leave explosive residues on  
warming  
    in air.

## HAZARDOUS DECOMPOSITION:

Thermal decomposition products: oxides of iridium

POLYMERIZATION: Will not polymerize.  
-----  
-

## SECTION 11 TOXICOLOGICAL INFORMATION

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-  
HEALTH EFFECTS:

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## INHALATION:

## ACUTE EXPOSURE:

IRIDIUM: May cause irritation.

## CHRONIC EXPOSURE:

IRIDIUM: No data available.

## SKIN CONTACT:

## ACUTE EXPOSURE:

IRIDIUM: May cause irritation.

## CHRONIC EXPOSURE:

IRIDIUM: No data available.

## EYE CONTACT:

## ACUTE EXPOSURE:

IRIDIUM: May cause irritation.

## CHRONIC EXPOSURE:

IRIDIUM: No data available.

## INGESTION:

## ACUTE EXPOSURE:

IRIDIUM: No data available.

## CHRONIC EXPOSURE:

IRIDIUM: No data available.

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-  
SECTION 12 ECOLOGICAL INFORMATION  
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Not available

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-  
SECTION 13 DISPOSAL CONSIDERATIONS  
-----  
-Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste  
Number(s): D001. Dispose in accordance with all applicable regulations.-----  
-  
SECTION 14 TRANSPORT INFORMATION  
-----  
-U.S. DOT 49 CFR 172.101 SHIPPING NAME-UN NUMBER:  
Metal powders, flammable, n.o.s. (iridium)-UN3089

U.S. DOT 49 CFR 172.101 HAZARD CLASS OR DIVISION:

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4.1

U.S. DOT 49 CFR 172.101 PACKING GROUP:  
II

U.S. DOT 49 CFR 172.101 AND SUBPART E LABELING REQUIREMENTS:  
FLAMMABLE SOLID

U.S. DOT 49 CFR 172.101 PACKAGING AUTHORIZATIONS:  
EXCEPTIONS: 49 CFR 173.151  
NON-BULK PACKAGING: 49 CFR 173.212  
BULK PACKAGING: 49 CFR 173.240

U.S. DOT 49 CFR 172.101 QUANTITY LIMITATIONS:  
PASSENGER AIRCRAFT OR RAILCAR: 15 kg  
CARGO AIRCRAFT ONLY: 50 kg

LAND TRANSPORT ADR/RID:  
SUBSTANCE NAME: Metal powder, flammable, n.o.s.  
UN NUMBER: UN3089  
ADR/RID CLASS: 4.1  
ITEM NUMBER: 13(b)  
WARNING SIGN/LABEL: 4.1  
HAZARD ID NUMBER: 40

AIR TRANSPORT IATA/ICAO:  
CORRECT TECHNICAL NAME: Metal powder, flammable, n.o.s.  
UN/ID NUMBER: UN3089  
IATA/ICAO CLASS: 4.1  
PACKAGING GROUP: II  
LABEL: Flammable solid

MARITIME TRANSPORT IMDG:  
CORRECT TECHNICAL NAME: Metal powders, flammable, n.o.s.  
UN/ID NUMBER: UN3089  
IMDG CLASS: 4.1  
PACKAGING GROUP: II  
EmS No.: 4.1-02  
MARINE POLLUTANT: N

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-  
SECTION 15 REGULATORY INFORMATION  
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-

U.S. REGULATIONS:  
TSCA INVENTORY STATUS: Y

TSCA 12(b) EXPORT NOTIFICATION: Not listed.  
CERCLA SECTION 103 (40CFR302.4): N  
SARA SECTION 302 (40CFR355.30): N  
SARA SECTION 304 (40CFR355.40): N  
SARA SECTION 313 (40CFR372.65): N  
SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40CFR370.21):

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ACUTE: N

CHRONIC: N

FIRE: Y

REACTIVE: N

SUDDEN RELEASE: N

OSHA PROCESS SAFETY (29CFR1910.119): N

STATE REGULATIONS:

California Proposition 65: N

EUROPEAN REGULATIONS:

EC NUMBER (EINECS): 231-095-9

GERMAN REGULATIONS:

WATER HAZARD CLASS (WGK): 0 (Official German Classification)

WATER HAZARD CLASS (WGK): 0 (Self Classification by Manufacturers and  
Distributors)

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SECTION 16 OTHER INFORMATION

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